Buildings to meet Lt. Gov.'s energy challenge

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Lt. Gov. John Garamendi recently challenged California college campuses to become more energy efficient and sustainable.

"Push the envelope," Garamendi said. "That's what this challenge is all about. Be creative about doing things that haven't been done."

Sustainability has been a goal at Sacramento State for many years and is part of the long term plan for the campus.

Sac State earned an Exemplary Program Award for environmental sustainability goals by having a written declaration that sets standards for educating students and the community in a campus report card issued by The National Wildlife Federation. The agency released its report on Aug. 21 showing participating schools, things they are doing well and areas where improvement needs to be made. More than 1,000 college campuses nation-wide participated.

Ron Richardson, facilities manager at Sac State, said sustainability has been a part of the philosophy on campus for many years. Currently, two building projects are underway on campus.

The new residence hall and the wellness center are both being built with the intention of being sustainable buildings. The rating system for sustainability is known as LEED.

Ratings for LEED fall into four categories: platinum, gold, silver and certified. Both building projects are targeted for silver ratings.

LEED was created to accomplish several goals. These goals are to establish a common standard of measurement, promote integrated, whole building design practices, recognize environmental leadership in the building industry, stimulate green competition, raise consumer awareness and transform the building market.

Garamendi said one of the changes that need to occur is in the planning of new buildings for LEED certification.

"If you are designing a building or landscaping, be bold. Approach with platinum," Garamendi said. "Force the president, the chancellor, the trustees, the legislature, and the governor to say no, we are not going to do that. Right now, it doesn't go that way. It comes down from the top."

"Buildings are the single biggest use of energy in the nation, it's like sixty percent of all energy use," Garamendi said. "It's not cars, it's air conditioners."

Low energy use and modern heating and air-conditioning devices are recognized as being key to reducing greenhouse gas emissions. Garamendi said heating and cooling are the biggest waste of energy on college campuses.

Richardson said new projects on campus, including the renovation of the old bookstore, will have modern, digital heating and air conditioning equipment that will allow for greater control of the use of energy.

Richardson said some of the future projects that are being discussed might include methods for reclaiming water used for irrigation. This would be accomplished through changing hard surfaces, such as sidewalks, so that the water drains back into the soil. All irrigation on campus is fed through well water.

"When the water used for irrigation runs into storm drains, it is wasted," Richardson said. "If we can get the water to run back into the ground, we can reuse it."

All other water use on campus is fed from the municipal water system. This water is known as gray water once it has been used. There are no current plans to reuse this water. Richardson said there is no funding for projects to reclaim gray water.

Recently, President Bush signed legislation that will create grants for college campuses nationwide to advance sustainability programs and aid in energy-efficiency on campus.

Garamendi said a change in culture must occur before change in practice can happen.

"Students need to seek in a thousand different ways to address the climate change issue," Garamendi said. "In doing so, the solution will be advanced. Students are very powerful and creative. Often, they think of things that no one else has thought about or dismissed because they thought it wouldn't work. The students can make it work."

Associated Students, Inc. runs an aggressive on-campus recycling program. ASI supports the use of paperless meetings, environmental building practices, and community education as strategic objectives.

Reducing paper waste has been a goal at Sac State for many years. In 2004-2005, the Financial Aid office saw an 80 percent drop in spending for postage after switching to the use of e-mail. Richardson said last year the campus recycled 83 percent of solid waste. The majority of students use the Sac State website for enrolling in classes, applying for financial aid, and paying fees. Richardson said last year the campus recycled 83 percent of solid waste.

Garamendi said students can do other things to reduce energy use and aid in sustainability. These include shutting off computers at night, using RT transit and light rail, and changing light bulbs to energy-efficient CFL light bulbs, Garamendi said.

"All these little things add up, even driving a little slower helps," Garamendi said.

Alfredo Rozco, University Transportation and Parking Services assistant director, said there has been an increase in students using RT transit, as well as a spike in ridership on the Hornet Shuttle system.

"Exact numbers are hard to get, because students in the past would get the sticker even if they did not plan to use RT transit," Orozco said. "Now that we are using the plastic sleeves, students who don't plan to use RT don't get the sleeves, making it easier for us to keep track of how many students are using it."

Cal Poly, San Luis Obispo was recognized by Garamendi as being a model for other California campuses to follow. Garamendi noted that the student organizations there have banded together to support environmental practices and education.

"The voice of one is magnified by the voices of many," Garamendi said.

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